



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,901	04/02/2001	Gregory Burns	MSI-095USC4	2420
22801	7590	06/23/2004	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			RYMAN, DANIEL J	
			ART UNIT	PAPER NUMBER
			2665	
DATE MAILED: 06/23/2004				

27

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/824,901	BURNS ET AL.
	Examiner	Art Unit
	Daniel J. Ryman	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 June 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 51-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 51-76 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 6/8/2004 have been fully considered but they are not persuasive. On pages 9-13, Applicant argues, with respect to claims 51-67, that "Mahany only describes one overall LAN system via which a roaming computing device forwards data to a host computer" since "As described by Mahany, a spontaneous or peripheral LAN is simply a communication component of the premises LAN". Thus, Applicant contends that Mahany does not disclose a first and second network. Examiner, respectfully, disagrees. Mahany explicitly refers to the peripheral LAN as distinct from the premises LAN. For instance, Mahany teaches that "In most circumstances, the premises LAN provides a rather optimal solution to the communications needs of a given network. However, in some circumstances...the premises LAN does not offer the optimal solution. Instead of relying on the premises LAN...alternate LANs are spontaneously created by (or with) network devices" (col. 9, lines 36-65 and col. 10, lines 50-67). In this passage, Mahany does not teach that limitations in the premise LAN are solved by extending the premise LAN, but rather Mahany teaches that creating an alternate LAN solves the problems. Thus, as broadly defined, Examiner maintains that Mahany teaches a first (premise LAN) and second network (peripheral or spontaneous LAN).

2. Applicant proceeds to argue that "Mahany only shows one network communication link via a base station over the premises LAN from the host computer 3011 to the roaming computer 3007" where the claim "recites that the server serves the content to the local service provider via the first network and over the second network". In addition, Applicant argues that Mahany does not disclose a "transmitter, responsive to the server, to transmit the content over a second

Art Unit: 2665

network". In response, Examiner, respectfully, submits that Mahany teaches, as argued above, that elements are capable of connecting to both peripheral LANs and the premise LAN where communication is established using the LAN which provides the best communication (col. 9, lines 36-65; col. 10, lines 50-67; and col. 44, line 42-col. 45, line 7). Thus, Mahany discloses, or at the very least suggests, that the computer terminal 3007 is capable of communicating with the host computer 3011 using either the premises LAN or a peripheral LAN depending on which network provides the best communication. As such, Examiner maintains that Mahany discloses "a transmitter, responsive to the server, to transmit the content over a second network to the local service provider, the second network providing additional bandwidth so that the transmitter can serve the content... in an event that the content is not served via the first network" where it is inherent that the server needs a transmitter in order to transmit information.

3. On pages 11-13, Applicant argues, with respect to claims 56 and 57, that there is no motivation or reason to modify Mahany to implement a broadcast satellite network to communicate inventory data in a warehouse or retail store environment. Examiner, respectfully, disagrees with Applicant's narrow interpretation of Mahany. Examiner submits that Mahany's invention is not expressly limited to a warehouse or retail store environment, as Applicant argues. Instead, Mahany discloses that the invention is applicable to a variety of different environments (col. 10, lines 14-18). As such, Examiner maintains that it would have been obvious to one of ordinary skill in the art to implement the second network as a broadcast satellite network since Mahany allows for a variety of different configurations for the network.

Art Unit: 2665

4. Given the above arguments, Examiner maintains the rejection of the claims. Examiner urges Applicant to amend the claims in order to add further limitations which will distinguish the claims from the prior art.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 51-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Mahany et al (USPN 5,657,317).

7. Regarding claim 51, Mahany discloses a content provider, comprising: a storage system to store content (ref. 3011: file server or ref. 4511: inventory computer) (col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a server (data base server; ref. 3011: file server; and ref. 4511: inventory computer) connected to the storage system to serve the content to a local service provider (master roaming computing device; ref. 3007: terminal; and ref. 4513: radio terminal) which provides the content to multiple clients (col. 10, lines 50-67; col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a network port adapted for connection to a first network (premises LAN), the server serving the content via the first network to the local service provider (col. 9, lines 36-65; col. 44, lines 4-26; and col. 61, lines 12-col. 62, line 31); and a transmitter, responsive to the server, to transmit the content over a second network (peripheral network) to the local service provider, the second network providing additional bandwidth so that the

transmitter can serve the content to the local service provider to in an event that the content is not served via the first network within a designated time period (response times) (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

8. Regarding claim 52, referring to claim 51, Mahany discloses that the network port comprises a connector compatible with a wire-based communications network (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31); and the transmitter comprises a transmitter capable of transmitting signals over a wireless medium (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

9. Regarding claim 53, referring to claim 51, Mahany discloses that the server is further configured to serve the content to the local service provider in response to requests from the multiple clients (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

10. Regarding claim 54, referring to claim 51, Mahany discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (col. 10, lines 50-67).

11. Regarding claim 55, referring to claim 51, Mahany discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (col. 10, lines 50-67); and the transmitter is further configured to

transmit the content over the second network to the at least one other local service provider (col. 10, lines 50-67).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 56-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahany et al (USPN 5,657,317).

14. Regarding claim 56, referring to claim 51, Mahany discloses that the first network is a high-speed, high-bandwidth network (col. 9, lines 52-col. 10, line 18). Mahany does not expressly disclose, but does strongly suggest, that the second network is a broadcast satellite network (col. 61, line 65-col. 62, line 3 and col. 63, lines 2-8) since Mahany discloses that the second network is wireless (col. 10, lines 19-67); that modifications to the embodiments are possible (col. 63, lines 9-13); and that a satellite link may be used to communicate information between devices (col. 10, lines 14-18; col. 61, line 65-col. 62, line 3; and col. 63, lines 2-8) where it is implicit that satellite links can communicate over great distances. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to a broadcast satellite network for the second network in order to extend the range of the of the network.

15. Regarding claim 57, Mahany discloses a content provider, comprising: a storage system to store content (ref. 3011: file server or ref. 4511: inventory computer) (col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a server (data base server; ref. 3011: file server; and ref. 4511:

Art Unit: 2665

inventory computer) connected to the storage system to serve the content to a local service provider (master roaming computing device; ref. 3007: terminal; and ref. 4513: radio terminal) which provides the content to multiple clients (col. 10, lines 50-67; col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a high-speed, high-bandwidth network (premises LAN) to communicate the content from the server to the local service provider (col. 9, lines 36-65; col. 44, lines 4-26; and col. 61, lines 12-col. 62, line 31); and a second network (peripheral network) to communicate the content from the server to the local service provider (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31). Mahany does not expressly disclose, but does strongly suggest, that the second network is a broadcast satellite network (col. 61, line 65-col. 62, line 3 and col. 63, lines 2-8). Mahany discloses that the second network is wireless (col. 10, lines 19-67); that modifications to the embodiments are possible (col. 63, lines 9-13); and that a satellite link may be used to communicate information between devices (col. 10, lines 14-18; col. 61, line 65-col. 62, line 3; and col. 63, lines 2-8) where it is implicit that satellite links can communicate over great distances. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to a broadcast satellite network for the second network in order to extend the range of the of the network.

16. Regarding claim 58, referring to claim 57, Mahany suggests that the broadcast satellite network includes additional bandwidth to communicate the content from the server to the local service provider (col. 10, lines 34-49).

17. Regarding claim 59, referring to claim 57, Mahany suggests that the broadcast satellite network includes additional bandwidth to communicate a portion of the content from the server

to the local service provider in an event that the high-speed, high-bandwidth network does not communicate the portion of the content within a designated time period (response times) (col. 10, lines 34-49).

18. Regarding claim 60, referring to claim 57, Mahany suggests that the server is further configured to serve a first portion of the content to the local service provider via the high-speed, high-bandwidth network, and serve a second portion of the content to the local service provider via the broadcast satellite network (col. 9, line 66-col. 10, line 18 and col. 10, lines 34-49).

19. Regarding claim 61, referring to claim 57, Mahany discloses that the server is further configured to serve the content to the local service provider in response to requests from the multiple clients (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

20. Regarding claim 62, referring to claim 57, Mahany discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (col. 10, lines 50-67).

21. Regarding claim 63, referring to claim 57, Mahany suggests that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (col. 10, lines 50-67); and the broadcast satellite network is further configured to communicate the content from the server to the at least one other local service provider (col. 10, lines 50-67).

22. Claims 64-76 are rejected under 35 U.S.C. 102(e) as being anticipated by Mahany et al (USPN 5,657,317) in view of Gupta et al. (USPN 5,555,244).

Art Unit: 2665

23. Regarding claim 64, Mahany discloses a content provider, comprising: a storage system to store content (ref. 3011: file server or ref. 4511: inventory computer) (col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a server (data base server; ref. 3011: file server; and ref. 4511: inventory computer) connected to the storage system to serve the content to a local service provider (master roaming computing device; ref. 3007: terminal; and ref. 4513: radio terminal) which provides the content to multiple clients (col. 10, lines 50-67; col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a network port adapted for connection to a first network (premises LAN), the server serving the content via the first network to the local service provider (col. 9, lines 36-65; col. 44, lines 4-26; and col. 61, lines 12-col. 62, line 31); and a transmitter, responsive to the server, to transmit the content over a second network (peripheral network) to the local service provider, the second network providing additional bandwidth so that the transmitter can serve the content to the local service provider to in an event that the content is not served via the first network within a designated time period (response times) (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31). Mahany does not expressly disclose that the content is video content. Gupta teaches, in a communication system, that it is well known to have servers provide video content in order to provide video-on-demand systems for end users (col. 30, line 54-col. 31, line 56). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the content be video content in order to provide video-on-demand systems for end users.

24. Regarding claim 65, referring to claim 64, Mahany in view of Gupta discloses that the network port comprises a connector compatible with a wire-based communications network

(Mahany: col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31); and the transmitter comprises a transmitter capable of transmitting signals over a wireless medium (Mahany: col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

25. Regarding claim 66, referring to claim 64, Mahany in view of Gupta discloses that the server is further configured to serve the content to the local service provider in response to requests from the multiple clients (Mahany: col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

26. Regarding claim 67, referring to claim 64, Mahany in view of Gupta discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (Mahany: col. 10, lines 50-67).

27. Regarding claim 68, referring to claim 64, Mahany in view of Gupta discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (Mahany: col. 10, lines 50-67); and the transmitter is further configured to transmit the content over the second network to the at least one other local service provider (Mahany: col. 10, lines 50-67).

28. Regarding claim 69, referring to claim 64, Mahany in view of Gupta discloses that the first network is a high-speed, high-bandwidth network (Mahany: col. 9, lines 52-col. 10, line 18). Mahany does not expressly disclose, but does strongly suggest, that the second network is a broadcast satellite network (Mahany: col. 61, line 65-col. 62, line 3 and col. 63, lines 2-8) since

Mahany discloses that the second network is wireless (col. 10, lines 19-67); that modifications to the embodiments are possible (Mahany: col. 63, lines 9-13); and that a satellite link may be used to communicate information between devices (Mahany: col. 10, lines 14-18; col. 61, line 65-col. 62, line 3; and col. 63, lines 2-8) where it is implicit that satellite links can communicate over great distances. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to a broadcast satellite network for the second network in order to extend the range of the of the network.

29. Regarding claim 70, Mahany discloses a content provider, comprising: a storage system to store content (ref. 3011: file server or ref. 4511: inventory computer) (col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a server (data base server; ref. 3011: file server; and ref. 4511: inventory computer) connected to the storage system to serve the content to a local service provider (master roaming computing device; ref. 3007: terminal; and ref. 4513: radio terminal) which provides the content to multiple clients (col. 10, lines 50-67; col. 43, lines 31-59 and col. 61, line 12-col. 62, line 3); a high-speed, high-bandwidth network (premises LAN) to communicate the content from the server to the local service provider (col. 9, lines 36-65; col. 44, lines 4-26; and col. 61, lines 12-col. 62, line 31); and a second network (peripheral network) to communicate the content from the server to the local service provider (col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31). Mahany does not expressly disclose, but does strongly suggest, that the second network is a broadcast satellite network (col. 61, line 65-col. 62, line 3 and col. 63, lines 2-8). Mahany discloses that the second network is wireless (col. 10, lines 19-67); that modifications to the embodiments are possible (col. 63, lines 9-13); and that a satellite

Art Unit: 2665

link may be used to communicate information between devices (col. 10, lines 14-18; col. 61, line 65-col. 62, line 3; and col. 63, lines 2-8) where it is implicit that satellite links can communicate over great distances. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to a broadcast satellite network for the second network in order to extend the range of the of the network. Mahany does not expressly disclose that the content is video content. Gupta teaches, in a communication system, that it is well known to have servers provide video content in order to provide video-on-demand systems for end users (col. 30, line 54-col. 31, line 56). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the content be video content in order to provide video-on-demand systems for end users.

30. Regarding claim 71, referring to claim 70, Mahany in view of Gupta suggests that the broadcast satellite network includes additional bandwidth to communicate the content from the server to the local service provider (Mahany: col. 10, lines 34-49).

31. Regarding claim 72, referring to claim 70, Mahany in view of Gupta suggests that the broadcast satellite network includes additional bandwidth to communicate a portion of the content from the server to the local service provider in an event that the high-speed, high-bandwidth network does not communicate the portion of the content within a designated time period (response times) (Mahany: col. 10, lines 34-49).

32. Regarding claim 73, referring to claim 70, Mahany in view of Gupta suggests that the server is further configured to serve a first portion of the content to the local service provider via the high-speed, high-bandwidth network, and serve a second portion of the content to the local

service provider via the broadcast satellite network (Mahany: col. 9, line 66-col. 10, line 18 and col. 10, lines 34-49).

33. Regarding claim 74, referring to claim 70, Mahany in view of Gupta discloses that the server is further configured to serve the content to the local service provider in response to requests from the multiple clients (Mahany: col. 9, lines 52-col. 10, line 18; col. 10, lines 34-49; col. 10, lines 50-67; col. 44, line 42-col. 45, line 7; col. 46, lines 1-8; and col. 61, lines 12-col. 62, line 31).

34. Regarding claim 75, referring to claim 70, Mahany in view of Gupta discloses that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (Mahany: col. 10, lines 50-67).

35. Regarding claim 76, referring to claim 70, Mahany in view of Gupta suggests that the server is further configured to serve the content to at least one other local service provider which provides the content to multiple clients (Mahany: col. 10, lines 50-67); and the broadcast satellite network is further configured to communicate the content from the server to the at least one other local service provider (Mahany: col. 10, lines 50-67).

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel J. Ryman
Examiner
Art Unit 2665

03/2

Daniel J. Ryman



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600